# INPLASY PROTOCOL

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**Review Stage at time of this submission: Preliminary searches.**

**Conflicts of interest:** None declared.

# Clinical Efficacy of Acupuncture Therapy for Sciatica: A Systematic Review and Meta-Analysis

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**Review question / Objective:** The purpose of this systematic review is to assess the efficacy of acupuncture therapy for sciatica, compared with sham acupuncture or drugs treatment. The selected research method is Randomised Controlled Trial (RCT).

**Condition being studied:** Sciatica can cause pain radiating along the route of the sciatic nerve and seriously affect the quality of patients' lives. Acupuncture therapy is widely used for pain control. However, the efficacy and safety of acupuncture in relieving sciatica are still uncertain.

**Information sources:** Search the databases, including China National Knowledge Internet (CNKI), Database for Chinese Technical Periodicals (VIP), Wanfang database, PubMed and Web of Science.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 April 2022 and was last updated on 10 April 2022 (registration number INPLASY202240060).

## INTRODUCTION

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## METHODS

**Participant or population:** participants with sciatica that must be diagnosed with a clear description of the diagnostic criteria.

**Intervention:** Acupuncture therapy alone (including manual acupuncture, electric acupuncture, warm acupuncture, fire acupuncture and Acupuncture plus moxibustion treatment, without distinguishing between different selections of acupoints or needle materials).

**Comparator:** Sham acupuncture or drugs therapy.

**Study designs to be included:** Randomised Controlled Trail (RCT)

**Eligibility criteria:** The diagnostic criteria were based on the North American Spine Society clinical guidelines.

**Information sources:** Search the databases, including China National Knowledge Internet (CNKI), Database for Chinese Technical Periodicals (VIP), Wanfang database, PubMed and Web of Science.

**Main outcome(s):** General effective rate, Visual analogue scale (VAS) score, Pain rating index(PRI), and other symptom improvement rate. Safety Index: adverse reactions.

**Quality assessment / Risk of bias analysis:** According to recommendations in the Cochrane Handbook of Systematic Reviews of Interventions, two reviewers independently evaluated the methodological quality of included trials using the Cochrane Collaboration's tool for assessing risk of bias that included the following domains: random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, selective reporting and other biases. For each domain, the risk of bias was rated as either "low," "high" or "unclear". If the evaluation results were inconsistent, issues were resolved by rechecking the source papers and further discussions with the third reviewer.

**Strategy of data synthesis:** The meta-analysis was performed using Review Manager (RevMan) software version 5.2, provided by the Cochrane Collaboration. The results of the GRADE evidence rating were recorded in GRADE evidence profiles using the GRADE profiler software. The risk ratio (RR) was chosen for dichotomous data (effective rate). The confidence interval (CI) was established at 95%, and P values of less than 0.05 were considered statistically significant. We used I2 values to assess between-study heterogeneity. If I2>75%, we considered the heterogeneity to be considerable, and if it could not be explained or when the number of studies was limited, a random effects model was applied .Otherwise, a fixed-effect model was applied. Publication bias was evaluated using a funnel plot analysis if a sufficient number of trials (≥10 trials) was found.

**Subgroup analysis:** According to standard clinical criteria in acupuncture therapy, the included studies will be divided into several subgroups in accordance with acupuncture methods, main acupoints, drugs, and outcomes, to evaluate the influence of observation type between subgroups on outcome heterogeneity.

**Sensitivity analysis:** The sensitivity analysis was performed using RevMan 5.3 by excluding the studies that introduced significant heterogeneity to the analysis on outcomes, to assess the robustness of our conclusions with regard to the assumptions underlying our analytic approach.

**Country(ies) involved:** China.

**Contributions of each author:**
Author 1 - Zhihui Zhang.
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Author 3 - Xinchang Zhang.
Author 4 - Guangxia Ni.